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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,205	09/24/2001	Kanetaka Sekiguchi	011231	6237

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ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

DUONG, TAI V

ART UNIT PAPER NUMBER

2871

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,205

Applicant(s)

SEKIGUCHI, KANETAKA

Examiner

TAI DUONG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 2, 8, 9, 13, 14, 16 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 3-7, 10-12 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 24 September 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claims 10, 12 and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. .

Previous claim 9 recites the auxiliary electrode being formed on the insulating film while claim 10, which depends on claim 9, recites the auxiliary electrode and the insulating film being in same planar pattern. The same issue is also applied to the segment electrodes and the insulating film being in same planar pattern of claim 12 (which depends on claim 11). Previous claim 2 recites the auxiliary electrode being formed of same transparent conductive film as that of said segment electrodes while claim 18, which depends on claim 2, recites the segment electrodes being formed of a metal film (non-transparent).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the connection or arrangement of the photovoltaic with respect to the previously recited elements of claim 2.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Shioji'476 cited by Applicant.

Note Figs. 5-8 and especially Fig. 16 which identically disclose the claimed LCD panel comprising a wiring electrode 23, a transparent auxiliary electrode 24 being provided around each segment electrode 22 with a slight gap between them (col. 8, line 53 - col. 9, line 50; col. 11, lines 44-51). As to claim 20, note Fig. 7. Regarding claim 21, note Figs. 6 and 7.

Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 55-89817 (JP'817) cited by Applicant.

Note Figs. 4-7 which identically disclose the claimed LCD panel comprising a transparent auxiliary electrode 7 between each segment electrode 8a-g and around the segment electrodes so as to overlap peripheral portions of the segment electrodes, and a transparent insulating film 11 being provided between the auxiliary electrode and the segment electrode.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Waldron.

Note Fig. 1b which identically discloses the claimed LCD panel comprising a transparent auxiliary electrode 14 being provided over the entire region of the first substrate 11, a transparent

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insulating film 30, segment electrodes 19a-b on the insulating film, and opposite electrode 22 on a second substrate 12 (Fig. 1).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shioji in view of Tani et al, Wadron, and JP 55-011211 (JP'211) cited by Applicant.

As to claim 16, Tani et al disclose in Figs. 3 and 4 that it was known to employ a photovoltaic device 54 disposed outside a second substrate 41 (cl. 2, lines 66-68). Thus, it would have been obvious to a person of ordinary skill in the art in view of Tani to employ a photovoltaic device in Shioji's LCD panel for obtaining a self-powered display panel.

As to claim 18, Waldron discloses that it was known to employ metal (reflective conductive electrode) segment electrodes (col. 2, lines 63-68). Thus, it would have been obvious to a person of ordinary skill in the art in view of Waldron to employ metal segment and wiring electrodes in Shioji's LCD panel for obtaining a reflective LCD panel.

As to claim 19, the JP'211 discloses in Figs. 1-3 that it was known to employ split auxiliary electrodes S. Thus, it would have been obvious to a person of ordinary skill in the art to

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employ split auxiliary electrodes in Shioji's LCD panel for obtaining a LCD panel having different colored backgrounds.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waldron.

The only difference between the LCD panel of Shioji's Fig. 7 and that of the instant claim is the plurality of segment electrodes 68. Note the insulating film 66 on the auxiliary electrode 62 being removed at portions where the segment electrode is not provided. Thus, it would have been obvious to a person of ordinary skill in the art to employ plural segment electrodes in Waldron's Fig. 7 for selectively displaying different characters or numbers.

Claim 15 is allowed over the prior art of record because none of the prior art discloses or suggests a LCD panel having the particular structures and arrangements of the auxiliary electrode, the segment electrodes, the opposite electrode, the segment electrode terminals, and the transparent insulating film, as recited in the claim.

Claims 3-7, 11 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-7, 11 and 17 are allowable over the prior art of record because of the combination of claim 2 or claim 8 with the particular structures of the wiring, auxiliary and segment electrodes, as recited in the claims.

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Any inquiry concerning this communication should be directed to Tai Duong at telephone number 703 308-4873.

TD

TVD

03/03



KENNETH PARKER
PRIMARY EXAMINER